
tyca FLOW CONTROL

## The well proven design of the Keystone F792 Low Profile Switchbox has been upgraded to simplify switch setting, site wiring and weatherproof integrity.

## Features

- Cams specially designed to operate either V9 microswitches or proximity sensors
- General purpose dustproof and weatherproof enclosure to IP65 rating.
- Switches prewired to terminal strip.
- Cable entries: 2-off Pg 13.5.
- Suitable for direct mounting to Keystone F790 actuators.
- Simple screw driver cam setting.
- Independently, top adjustable cams, accessible at all degrees of opening.
- Infinitely adjustable.
- Locking screw provides full face friction of the cams ensuring optimum repeatability, as cams firmly lock after adjustment.
- Clearly visible position indicator.
- Anodised and ESPC* aluminium enclosure provides full environmental protection.
- Readily adaptable to suit all rotary actuators.
- Terminal strip angled for easy wiring.
* Electrostatic powder coating.


## Options

- V9 microswitches.
- Inductive proximity sensors.
- Pneumatic switches.
- Direct mounted High Visibility Indicator.


## General Applications

For position sensing on manual or automated valves in general industrial environments.
Refer F792-K series Switchboxes for hazardous applications.



## Operating Specifications

## Temperature Rating:

Minus $25^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$ for Micro and Proximity switches.
Minus $15^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$ for Pneumatic switches.

## Enclosure Protection:

IP65 dust and weatherproof.

## Action:

$360^{\circ}$ rotary normally set for $90^{\circ}$ action.


| Parts List |  |  |
| :--- | :--- | :--- |
| No. | Description | Material |
| $\mathbf{1}$ | Body | Die cast aluminium LM24 <br> (anodised and ESPC* coated) |
| $\mathbf{2}$ | Cover | Die cast aluminium LM24 <br> (anodised and ESPC* coated) |
| $\mathbf{3}$ | Cams (not shown) | Acetal |
| $\mathbf{4}$ | Shaft | Acetal |
| 5 | Position Indicator | A.B.S. (acrylonitrile butadiene styrene) |
| 6 | Fasteners | Stainless Steel |
| 7 | Fastener Seals | Nylon |
| 8 | Gasket | Nitrile |
| 9 | Dome | Ektar (DN004 copolyester) |

Note:
*Electrostatic powder coating


Option 1 Low profile switchbox with two V9 single pole double throw microswitches

Proximity Plan
Proximity Wiring Diagram


Pneumatic Switch Plan


Note:
2 Wire Schematic Illustrated.


## Note:

3 Wire Schematic Illustrated.


Option 3 Low profile switchbox with two pneumatic switches

Caution:
Reverse air connections will cause venting into enclosure

| Microswitch <br> Voltage <br> (Volts) |  |  |  |  |  |  | Resistive load <br> (Amps) | Tungsten lamp load (amps) <br> NC | Inductive load <br> (Amps) |
| ---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AC | 125 | 10 | 2 | 1 | 10 |  |  |  |  |
| 250 | 10 | 1.5 | 1 | 10 |  |  |  |  |  |
| DC | Up to 15 | 15 | 3 | 1.5 | 15 |  |  |  |  |
| 30 | 10 | 3 | 1.5 | 10 |  |  |  |  |  |
| 50 | 3 | 0.8 | 0.8 | 2.5 |  |  |  |  |  |
| 75 | 1 | 0.6 | 0.6 | 0.5 |  |  |  |  |  |
| 125 | 0.5 | 0.5 | 0.5 | 0.07 |  |  |  |  |  |
| 250 | 0.25 | 0.25 | 0.25 | 0.03 |  |  |  |  |  |

## Proximity Sensor Specifications - 2 \& 3 Wire Specification

Proximity Sensor- 2 wire specification
Type: $\quad$ Pepperl \& Fuchs NJ2-V3-N or equivalent
Sensing Distance: 2 mm maximum (metal face). NB separate amplifier required
Supply: $\quad 8 \mathrm{~V}$ DC (Ri approx. 1k0hm)
Output: - Sensor absent - 3mA or above

- Sensor present - 1mA or below

Proximity Switch - 3 wire specification
Type: Bailiff BES 5173
Supply Voltage: 10-30VDC
Current: $\leq 200 \mathrm{~mA}$
Frequency: $\leq 1500 \mathrm{~Hz}$

## Pneumatic Switch Specifications

Signal connections: 4 mm O.D. tube.
Switch details: - Telemecanique PXC-M111 or equivalent

- 2 switches per box
- Switches normally non passing (NNP)
- Capacity - $60 \mathrm{~L} / \mathrm{min}$ at 550 kPa to atmosphere
- pressure range $300-800 \mathrm{kPa}$

Temperature range: Minus $15^{\circ} \mathrm{C}$ to $60^{\circ} \mathrm{C}$
For Trimming Only DO NOT PRINT
Controls - F792 Switchbox LP Series


| Selection Guide |  |  |
| :--- | :--- | :--- |
| EDP Description | Part No. | Comments |
| F792 LSB LP WP 2SPDT 20-260VAC | 422987 | Weatherproof type with two 240 VAC electrical switches |
| F792 LSB LP WP PROX NAMUR | 169555 | Weatherproof type with two 8 VDC proximity sensors |
| F792 LSB LP WP PROX NO PNP | 642884 | Weatherproof type with two 10-30 VDC proximity switches |
| F792 LSB LP WP PROX NC PNP | 764321 | Weatherproof type with two 24 VDC proximity switches |
| F792 LSB LP WP PROX NO NPN | 768482 | Weatherproof type with two 24 VDC proximity switches |
| F792 LSB LP WP PROX NC NPN | 252866 | Weatherproof type with two 24 VDC proximity switches |
| F792 LSB LP WP PROX AC | 116538 | Weatherproof type with two $20-260$ VAC proximity switches |
| F792 LSB LP WP 2 PNEU NNP | 812791 | Weatherproof type with two pneumatic switches |

## Note:

SPDT = Single Pole Double Throw
NO = Normally Open
NC $=$ Normally Closed
NNP $=$ Normally Non Passing

